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December 7, 2007

Delivered By Hand

Mr. James Matteau, Executive Director
Windham Regional Planning Commission
139 Main Street
Brattleboro, VT 05301

Re: Petition of Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc., for its Certificates of Public Good and Approvals required under 10 V.S.A. §§ 6501-6504 and 30 V.S.A. §§ 231(a), 248 and 254, for authority to renew operation of the Vermont Yankee Nuclear Power Station, including the storage of spent-nuclear fuel, after March 1, 2012

Dear Jim:

As discussed and in accordance with Subsection 248(f) of Title 30, Vermont Statutes Annotated, this letter provides notice to the Windham Regional Commission (the "Commission") that Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc., the owner and operator of the Vermont Yankee Nuclear Power Station, respectively (collectively, "Entergy VY"), will be filing a petition with the Vermont Public Service Board (the "PSB" or the "Board") seeking a certificate of public good or "CPG" authorizing continued operation of the Vermont Yankee Nuclear Power Station (sometimes referenced herein as the "Station," "Site" or "Vermont Yankee"), including the storage of spent-nuclear fuel ("SNF"), after March 21, 2012, in Vernon. Entergy VY is submitting its plans so that the Commission can understand and undertake a preliminary evaluation of the overall project as described in this letter (the "Project"), including whether the Project will unduly interfere with the orderly development of the region.

Below, at Sections I-IV and Tabs 1-4 to this letter, we have provided the information required under PSB Rule 5.402 (A) (4) for pre-filing submissions to municipal and regional planning commissions

and municipal legislative bodies. At Sections V-X and Tab 5 to this letter, we have provided responses to the Commission's requests for information set forth in your memorandum of November 15, 2007, as supplemented by your request for additional information on November 21, 2007.

Please note that the information provided below is being provided in advance of Entergy's VY filing of its petition with the Board and, in relation to some specific issues discussed below, without the benefit of review by Entergy VY's expert witnesses who will be testifying on these issues. Entergy VY expects to file its petition with the Board no earlier than January 21, 2007.

Also please note, as discussed with you, that pursuant to PSB Rule 5.402 (A) (1), if Entergy VY's petition contains new or more detailed information not included in this pre-filing, the Commission may provide revised recommendations or comments as to whether the Project will unduly interfere with the orderly development of the region to the Board within forty-five (45) days of the date that the petition is filed with the Board.

Last, please note that under Vermont law the PSB cannot review Entergy VY's petition before July 1, 2008, unless the Vermont General Assembly has first approved the Station's continued operation. Entergy VY does not expect, therefore, that the Section 248 and 254 proceedings will begin before next summer.

I. Project Plans

A site plan prepared by SVE Associates — titled "Existing Conditons Plan Entergy Nuclear Vermont Yankee Vernon, Vermont" and depicting the location of existing and on-going infrastructure (e.g., transmission, substations, roads, etc.) — is attached as Tab 1 to this letter. No new infrastructure is proposed at the Site as part of the Project.

II. Aesthetic Impact

Attached at Tab 2 are (i) viewshed maps titled "Vermont Yankee Visual Analysis Visibility of Reactor Complex in Summer" and "Vermont Yankee Visual Analysis Visibility of Stack in Summer" dated November 30, 2007; and (ii) photographs titled "Existing Conditions Photographs – Entergy Nuclear Vermont Yankee Vernon, Vermont" prepared by Dodson Associates, and taken on November 27, 2007 from the New Hampshire shoreline, from Route 142 approximately 3/8th of a mile north of the Station and from Route 142 approximately 4.8 miles north of the Station depicting the location, context and visibility of the Station. As stated above, no new infrastructure is proposed at the Site as part of the Project.

III. Transportation of Equipment and Materials to the Site

No new construction is contemplated for the Project, and the normal and customary deliveries of goods and services will continue at Vermont Yankee. These deliveries include but are not limited

to such goods as consumable industrial materials, new equipment, new fuel and fuel oil deliveries. Entergy VY does not anticipate an increase in services or traffic over and above existing levels.

IV. Evaluation of Alternatives to the Proposed Project

Entergy VY's only alternative to the Project would be to close Vermont Yankee. Attached as Tab 3 is a chart from the 2005 Vermont Electric Plan prepared by the Vermont Department of Public Service showing the size of the anticipated peak load and Vermont's committed resources, including Vermont Yankee, to and following March 21, 2012. As summarized in the 2005 Vermont Electric Plan at page 4-19, there is an approaching gap in the supply of Vermont electric power with no current plans to build or construct any new committed base load power generation in the state.

Alternative energy sources such as wind, solar, biomass or small-scale hydro are generally small scale and not base load. Such sources cannot replace the amount or type of power generated by Vermont Yankee. In addition, as shown in the excerpt from the "Vermont's Energy Futures" report (a report prepared by the Vermont Department of Public Service in connection with Vermont's public engagement process for review of Vermont's energy future) at Tab 4, efficiency and demand-side-management efforts have been and can be effective in lowering demand for electricity, but the reductions achieved have not approached and will not be able to approach the amount of electricity contributed to the Vermont and New England energy supply mix by Vermont Yankee.

The 2005 Vermont Electric Plan and the Vermont Department of Public Service's "Vermont's Energy Future" report can be accessed at the Vermont Department of Public Services website: **http://publicservice.vermont.gov/**

V. Spent Fuel Management

Vermont Yankee takes its stewardship of SNF seriously. The Department of Energy ("DOE") has responsibility by law to safely transport and dispose of SNF from all commercial nuclear power plants. Each nuclear plant has a contract with the DOE to remove fuel from their sites, which by that agreement was to have begun in 1998. There are currently several law suits against the DOE to require action by DOE to fulfill the terms of the contract. Until such time that the DOE begins to take possession of SNF, Vermont Yankee will continue to store SNF on-site.

A. Fuel Pool

i. Planned changes in current volume

Entergy VY expects to load five new dry fuel storage casks, each holding 68 fuel assemblies, during the first half of 2008. The volume of SNF in the spent fuel pool is scheduled to decrease, therefore, by 340 fuel assemblies in 2008. Going forward, Entergy VY projects the same rate of discharge of SNF to the spent fuel pool as it has experienced in the past, that is, approximately 124 fuel assemblies every 18 months.

ii. **Plans for return to "full core offload capacity"**

The expected loading campaign in 2008 will return the Station to full core offload capability.

B. **Dry cask storage**

i. **Current permitted casks and fuel assemblies**

Part 72 of Title 10 of the Code of Federal Regulations addresses the licensing requirements for Entergy VY's storage of SNF in dry casks at the Station. In addition, Entergy VY obtained a Section 248 CPG for the storage of SNF in dry casks in Vermont Public Service Board Docket No. 7082. As represented in Docket No. 7082, Entergy VY is using the Holtec Hi-Storm cask system, with the capability of storing 68 fuel assemblies per cask. As constructed, Entergy VY's dry fuel storage pad can accommodate 36 casks.

1. **Anticipated loading schedule**

As noted in A.i above, Entergy VY expects to load five casks during the first half of 2008; the specific schedule for loading additional SNF beyond the first five casks has not been developed. However, future loading campaigns will be developed to maximize operational flexibility (e.g., full core offload capability) as well as compliance with any existing and future NRC requirements.

ii. **Additional casks required 2012 – 2032 (please assume worst case scenario of transfer to DOE or any storage facilities)**

The current spent fuel storage pad can accommodate up to 36 casks. Entergy VY projects that up to 36 casks will be required to allow the Station to operate through 2032.

1. **Anticipated loading schedule**

As noted in B.i.1. above, no specific loading schedule has been developed. Each campaign, however, will be completed in a way that maximizes operational flexibility and minimizes the number of individual loading campaigns.

2. **Changes or additions to pad**

There will be no need for any additional pads or changes to the existing pad as a result of operation from 2012 to 2032. However, with or

without operation past 2012 a new dry fuel storage pad will be needed during decommissioning of the Station.

iii. **Dry cask plans beyond 2032 (please assume worst case scenario of no transfer to DOE or any other storage facilities)**

Dry fuel storage plans following shutdown in 2032 will consist of construction of a new storage facility outside the current protected area large enough to accommodate all fuel from the existing pad as well as the spent fuel pool.

C. **Status of all spent fuel and pool contents after shutdown**

i. **2012**

Following a shutdown in 2012, there will be some SNF stored in casks on the storage pad and some fuel in the spent fuel pool, as more recently-generated SNF cannot be moved to dry casks for a period of time, and, in any event, there will not be enough room on the existing spent fuel storage pad to accommodate all spent fuel. SNF will remain in these two locations for a period of time until either DOE removes the SNF or a new spent fuel storage pad is constructed and the SNF is placed in dry casks for storage there.

ii. **In 2032**

Following a shutdown in 2032, there will be some SNF stored in casks on the storage pad and some fuel in the spent fuel pool, as more recently-generated SNF cannot be moved to dry casks for a period of time, and, in any event, there will not be enough room on the existing spent fuel storage pad to accommodate all spent fuel (assuming no transfer of SNF to the DOE). SNF would remain in these two locations for a period of time until either DOE removes the SNF or a new spent fuel storage pad is constructed and the SNF is placed in dry casks for storage there.

VI. **Any information regarding plans to file for a second 20 year NRC renewal and PSB extension after March 2012.**

At this time, Entergy VY has not considered and therefore has no information regarding plans to apply for an additional 20-year extension.

VII. Decommissioning Plans

A. Anticipated schedule following a 2012 shutdown

The timing of decommissioning will depend on the status of the decommissioning trust funds as compared to the projected costs of decommissioning. For a 2012 shutdown, if the decommissioning trust funds are sufficient, Entergy VY can start immediate decommissioning. If the funds are not sufficient, the Station will be placed in a SAFSTOR condition for a period of time to allow the decommissioning trust funds to grow to a level sufficient to fund the entire decommissioning project. This concept of delayed decommissioning was discussed in both the sale proceeding for the Station (Docket No. 6545) and the dry fuel storage proceedings (Docket No. 7082) before the PSB. Entergy VY's Decommissioning Cost Analysis (December 2006) presents four decommissioning scenarios based on a 2012 shutdown date. We can provide a copy of Entergy VY's Decommissioning Cost Analysis (December 2006) at the Commission's request.

B. Anticipated schedule following a 2032 shutdown

See Response to VII.A. above. For a 2032 shutdown, Entergy VY's Decommissioning Cost Analysis (December 2006) presents four decommissioning scenarios based on a 2032 shutdown date.

C. Additional radiation absorbed by components between 2012 and 2032, and its effect on SAFSTOR

SAFSTOR allows for radioactive decay, which decreases net radioactive activation. There should be no significant additional radiation absorption during the period 2012 – 2032. To the extent any additional activation occurs, SAFSTOR will allow for some reduction of that additional amount before dismantlement.

D. Options for DECON at 2012 and at 2032

As stated above, the timing of decommissioning will depend on the status of the decommissioning trust funds as compared to the projected costs of decommissioning. Entergy VY's Decommissioning Cost Analysis (December 2006) presents four DECON decommissioning scenarios based on 2012 and 2032 shutdown dates.

In general, it is more likely that the decommissioning trust funds will be sufficient to commence immediate decommissioning (DECON) in a 2032 shutdown scenario. In its sale order (Docket No. 6545), the Board acknowledged this possibility and noted that as a result of an additional 20 years of funds growth, assuming license renewal, there could be a surplus of funds in the trusts. In that case, the Board's order made provision for distribution of such excess funds.

E. **Other Decommissioning Questions**

In addition to the requests for information contained in your e-mail of November 15, 2007, you have requested that Entergy VY provide information on the following items.

i. **Decommissioning Fund Status: 2007, 2012, 2032 and 2052**

As reported to the Vermont Department of Public Service on July 27, 2007, the market value of the Vermont Yankee decommissioning trust funds as of March 31, 2007, was $422,182,237. An updated report on the status of the funds as of September 30, 2007, will be prepared and filed in the coming weeks pursuant to reporting requirements contained in the Docket No. 6545 Memorandum of Understanding. Please let us know if you would like a copy of this report when it is filed.

Projections of decommissioning-fund growth would be dependent on various market, investment and other assumptions. Entergy VY manages its decommissioning funds in such a way as to meet its federal and state decommissioning obligations. As reported to the Board in January 2007, Entergy VY obtained an annual, after-tax rate-of-return on its decommissioning trust funds of 6.87% from its acquisition of the Station on July 31, 2002 through November 30, 2006. Additional information regarding decommissioning-trust-fund status and growth can be obtained from Entergy VY's semi-annual filings with the Department.

ii. **Estimated Decommissioning Cost in 2012 (DECON 2012)**

Entergy VY's Decommissioning Cost Analysis (December 2006) contains two cost-estimate scenarios for an assumed 2012 shutdown utilizing DECON. See Decommissioning Cost Analysis Scenarios 1 and 3 for specific information on cost estimates and the assumptions underlying those cost estimates. Note that the eight scenarios contained in the Decommissioning Cost Analysis were developed in response to the Board's final order in Docket No. 7082.

iii. **Estimated Decommissioning Cost in 2032 (SAFSTOR 2012)**

Entergy VY has not estimated the costs of decommissioning in 2032 based on a 2012 shutdown and implementation of SAFSTOR. The Decommissioning Cost Analysis (December 2006), however, contains two cost-estimate scenarios that assume a 2012 shutdown and implementation of SAFSTOR. Scenario 5 assumes SNF would stay on-site until 2042, and Scenario 7 assumes SNF would stay on-site until 2082.

iv. **Estimated Decommissioning Costs in 2032 (DECON 2032)**

Scenarios 2 and 4 of the Decommissioning Cost Analysis (December 2006) contain cost estimates for the DECON alternative assuming a 2032 shutdown and two different dates (2057 and 2082) for final removal of SNF by DOE.

v. **Estimated Decommissioning Costs in 2052 (SAFSTOR 2032)**

Entergy VY has not estimated the costs of decommissioning in 2052 based on a 2032 shutdown and implementation of SAFSTOR. The Decommissioning Cost Analysis (December 2006), however, contains two cost-estimate scenarios that assume a 2032 shutdown and implementation of SAFSTOR. Scenario 6 assumes SNF would stay on-site until 2057 and Scenario 8 assumes SNF would stay on site until 2082.

VIII. Need for Power Generated by the Station

A. As part of Vermont's contracted power mix

The existing contract for power from Vermont Yankee expires on March 21, 2012. Therefore, new contracts must to be negotiated between now and then. Initial discussions indicate that some distribution utilities in Vermont would like to continue purchasing power from Vermont Yankee. Vermont Yankee provides 620 MWe net power to the New England grid. Having a large, base load supplier in state helps ensure adequate Vermont/New England power supply and improves Vermont's negotiation position going forward for future needed contracts.

Entergy VY has previously addressed the importance of Vermont Yankee power to Vermont and New England in the testimonies of Jeffrey Tranen and Ernest J. Moniz in the dry-fuel-storage proceedings (Docket No. 7082) before the Board. Copies of Mr. Tranen's and Dr. Moniz's testimony can be provided to the Commission at the Commission's request.

Recent studies and reports including the 2005 Vermont Electric Plan and the Vermont Department of Public Service's "Vermont's Energy Future" (a report prepared in connection with Vermont's public engagement process for review of Vermont's energy future) have also addressed the questions of need and alternatives. The 2005 Vermont Electric Plan and the Vermont Department of Public Service's "Vermont's Energy Future" report can be accessed at the Vermont Department of Public Services website: http://publicservice.vermont.gov/

B. **As part of New England's regional supply**

See discussion under VIII. A. above.

C. **In relation to alternative sources**

See discussion under IV. and VIII. A. above. As there noted, Vermont Yankee is a large base load supplier of electricity that does not emit greenhouse gases. As discussed in the testimonies and reports referenced above, there are no other committed base load generators of Vermont Yankee's size in Vermont today or currently being planned for the long-term. Alternative energy sources. such as wind, solar, biomass or small-scale hydro, are generally small scale and not base load. Such sources cannot replace the amount or type of power generated by Vermont Yankee. In addition, while efficiency and demand-side-management efforts have been and can be effective in lowering demand for electricity, the reductions achieved have not approached and will not be able to approach the amount of electricity contributed to the Vermont and New England energy supply mix by Vermont Yankee.

IX. **Cost of power**

A. **Projected production costs (per MWe)**

Entergy VY's projected production costs constitute proprietary business information that is confidential to Entergy VY.

B. **Projected New England market rates**

Attached at Tab 5 is an excerpt from the 2005 Vermont Electricity Plan that discusses current forecasted and demand for electricity. Current projections of New England rates can be retrieved from the Vermont Department of Public Service web site. Attached is the link: http://publicservice.vermont.gov/other-resources/fuel-links.html

X. **"Orderly development of the region"**

A. **Effect on local employment**

As testified by Jay Thayer in the dry-fuel-storage proceeding before the Board in Docket No. 7082, the Station provides some 495 permanent jobs as well as contract work and temporary influxes of other personnel during refuelings or other projects.

B. **Effect on local taxes**

Entergy VY is and will remain a significant taxpayer and currently pays nearly $10 million annually in taxes to the State of Vermont and the Towns of Vernon and Brattleboro.

C. **Effect on required emergency response and evacuation planning**

i. **During operation**

There will be no effect on emergency response and evacuation planning in the region as a result of the Station's continued operation. Vermont Yankee will continue to play an important role with the states and will continue to fund various state programs that support both emergency planning and Homeland Security.

ii. **Post shutdown**

As long as there is SNF on-site at Vermont Yankee, Entergy VY will be required to have an appropriate emergency response program. Since the Station will not be operated post shutdown, the emergency response requirements will be different than now. However, the Station will continue to meet NRC standards for emergency response for a decommissioned plant as long as SNF is stored on-site.

iii. **Security for dry cask facility post shutdown**

The security for a dry fuel storage facility, post shutdown, is still governed by the NRC, and the Station must still meet the NRC's requirements.

D. **Effect on future alternatives**

i. **If this extension is needed for lack of alternatives, e.g., how does it bridge to a different situation in 2032?**

While it is expected that within the next 20 years, during the license renewal period, other alternatives will be developed, Entergy VY cannot speculate as what those alternatives may be. Until those alternatives are developed, the Station can continue to provide committed, base load power that does not emit greenhouse gases.

This letter and its enclosures are provided to the Commission pursuant to Subsection 248(f), which requires that Entergy VY provide the Commission with plans and notice at least forty-five (45) days in advance of Entergy VY's filing of its application with the Board under Sections 248

and 254. Please note that the Commission has the right to review Entergy VY's proposal, either informally or by holding a public hearing. Also, as noted above, if Entergy VY's petition contains new or more detailed information not included in this pre-filing, the Commission may provide revised recommendations or comments as to whether the Project will unduly interfere with the orderly development of the region to the Board within forty-five (45) days of the date the petition is filed with the Board. Finally, note that the Board has posted a "Citizen's Guide to the Vermont Public Service Board's Section 248 Process" at its website: *www.state.vt.us/psb/document/Citizens_Guide_to_248.pdf*

In addition to the CPG petition that Entergy VY will be filing with the Public Service Board, Entergy VY will also take all necessary steps to comply with Chapter 157 of Title 10 of the Vermont Statutes Annotated for, storage of SNF at the Station after March 21, 2012, and other applicable State statutes.

If you have any questions about this notice or Entergy VY's proposal, please let me know. We look forward to the Commission's review of the within matters.

Sincerely,

Peter D. Van Oot

Enclosures
c: Vermont Public Service Board
Vermont Department of Public Service
Mr. John Dreyfuss
Mr. Michael Metell
Mr. David McElwee
John H. Marshall, Esq.
Bill Dennis, Esq.

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Tab 1

Site Plan

Tab 2

Viewshed maps titled "Vermont Yankee Visual Analysis Visibility of Reactor Complex in Summer" and "Vermont Yankee Visual Analysis Visibility of Stack in Summer"; and (ii) Photographs titled "Existing Conditions Photographs – Entergy Nuclear Vermont Yankee Vernon, Vermont " prepared by Dodson Associates.

Tab 3

2005 Vermont Electric Plan Chart re Projected Peak Load and Committed Resources

Tab 4

"Vermont's Energy Future" Excerpt re Impact of Energy Efficiency Efforts

Tab 5

2005 Vermont Electric Plan Excerpt re Current Forecasted and Demand for Energy